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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,240	03/15/2001	Hideo Ando	204331US-2S	6633

22850 7590 12/24/2003

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ALEXANDRIA, VA 22314

EXAMINER

CHIEU, PO LIN

ART UNIT PAPER NUMBER

2615

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/808,240

Applicant(s)

ANDO ET AL.

Examiner

Polin Chieu

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 20-31 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 12/18/03
3. Claims <sup>20-31</sup>~~20~~ are rejected under 35 U.S.C. 103(a) as being unpatentable over Saeki et al (6,078,727) in view of Yanagihara (6,028,726).

Regarding claim 20, Saeki et al teaches recording with a data structure using transport stream packets and data units (figs. 10 and 15); a data area for recording object data (fig. 10) of the stream data using the transport stream packets, a management area for recording management information of the object data (fig. 8), wherein the data structure organizes the object data as one or more of the data units included in the stream data (fig. 10), each one of the data units including the transport stream packets (fig. 10); receiving the stream data (9, fig. 15); and recording the received data stream data on the information medium in accordance with the data structure (fig. 10). However, Saeki et al does not disclose specifically a MPEG-TS; and information indicating an arrival time of a first packet of one of the data units.

Yanagihara teaches recording stream data of MPEG-TS in accordance with a data structure using transport stream packets (col. 5, lines 7-65); and information indicating the arrival time of a first packet of one of the data units (col. 6, lines 11-20). Further, Yanagihara teaches the size of one of the data units (Saeki et al, col. 10, lines 11-22) is larger than one of the transport stream packets (col. 1, lines 45-50).

It would have been highly desirable to record an MPEG-TS in accordance with a data structure using transport stream packets so that a MPEG-TS stream can be recorded on a DVD (i.e. Saeki et al simply discloses a receiver making it unclear what type of signal formats can be received and recorded), thereby providing the user with more options as to what types of signals can be received and recorded. It would have been highly desirable to have information indicating the arrival time of a first packet of one of the data units so that the MPEG2 program can be retrieved (col. 6, lines 4-20).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to record a MPEG-TS and the arrival time of transport packets in the device of Saeki et al.

Regarding claims 21 and 26, Saeki et al discloses recording, in the management area, at least a time difference value (fig. 11) corresponding to a difference between a first time stamp recorded in a first data unit and a second time stamp recorded in a second data unit, said first and second data units being included in the plurality of said data units (col. 10, line 22 – col. 11, line 37).

Regarding claims 22 and 27, Saeki et al does not explicitly disclose determining the time difference value by rounding to a predetermined number of effective digits a

difference between a time information value corresponding to the second time stamp and a time information value corresponding to the first time stamp.

Saeki et al discloses determining a time difference by determining the time difference between two time stamps, as discussed in the art rejection of claim 21. It is well known in art of mathematics to round to a predetermined number of digits. For example,  $1/3$  is often rounded of to a predetermined number of digits, such as .333. However,  $1/3$  is not a finite number.

It would have been highly desirable to round the time difference value to a predetermined number of digits to simplify the time difference operation and reduce the number of bits needed to store the time difference value.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to round the time difference value to a predetermined number of effective digits in the device of Saeki et al.

Regarding claims 23 and 28, Saeki et al discloses computing the time difference value using a value of the first time stamp recorded in the first one of the data packets located in each of the data units (col. 10, line 22 – col. 11, line 37).

Regarding claims 24 and 29, Saeki et al discloses computing the time difference (col. 10, line 22 – col. 11, line 37). However, Saeki et al does not disclose recording a time stamp in one of the data packets at an end of a last one of the data units included in the stream data indicating an arrival time of a last one of the data packets in the last one of the data units; and computing the time difference value using the arrival time of the last one of the data packets.

Yanagihara teaches storing arrival times of each packet (col. 6, lines 1-20). It is clearly obvious that a time difference between a particular packet and the last packet can be calculated using the arrival times of the particular packet and the last packet.

It would have been highly desirable to calculate the time difference between packets to aid playback functions (i.e. fig. 21, 205).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to compute the time difference values using the arrival time of the last one of the data packets in the device of Saeki et al.

Regarding claim 30, many of the limitations of claim 30 were discussed in the art rejection of claims 20 and 25. Please refer to the art rejection of claims 20 and 25. Additionally, Saeki et al discloses a receiver block configured to receive the stream data (9, fig. 15); and a recorder block configured to record the stream data received by the receiver block on the information medium in accordance to the data structure (3).

Regarding claim 31, many of the limitations of claim 31 were discussed in the art rejection of claims 20 and 25. Please refer to the art rejection of claims 20 and 25. Additionally, Saeki et al discloses a reproducer block configured to reproduce the stream data with the data structure from the information medium (3, fig. 15); and a decoder block configured to decode the stream data reproduced by the reproducer block (4).

**Conclusion**

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Polin Chieu whose telephone number is (703) 308-6070. The examiner can normally be reached on M-Th 8:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B. Christensen can be reached on (703) 308-9644. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any response to this action should be mailed to:

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Art Unit: 2615

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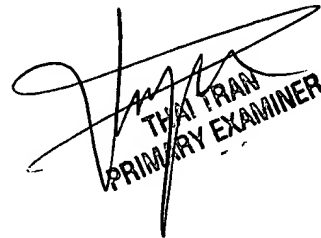
Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

PC  
December 17, 2003

  
THAI TRAN  
PRIMARY EXAMINER